AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-42. (Cancelled)

43. (New) An expression vector for transducing a target cell of a host comprising:

a first nucleic acid sequence encoding an extracellular domain of an α-chain of a CD8 joined to a transmembrane domain; and

a second nucleic acid sequence encoding a therapeutic molecule of interest,

wherein, when the extracellular domain of the α-chain of the CD8 is expressed on a surface of the target cell transduced with the expression vector, an immune reaction by the host directed to expression vector associated antigens and the therapeutic molecule of interest is suppressed.

44. (New) The expression vector of claim 43 wherein the transmembrane domain is a transmembrane domain of an α-chain of a CD8.

45. (New) The expression vector of claim 43 wherein the transmembrane domain is a synthetic transmembrane domain.

46. (New) The expression vector of claim 43 wherein the therapeutic molecule of interest is selected from one of hemoglobin-β, GATA-binding protein, d-aminoevulinate synthase, glucose-6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α-L-iduronidase, iduronate-2-sulfatase, β-glucosidase, α-galactosidase, galactosylceramidase, acid α-glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, α5, Bloom Syndrome Gene Product, or low density lipoprotein receptor.

47. (New) The expression vector of claim 43 wherein the expression vector is selected from one of a recombinant adenovirus or a recombinant adeno-associated virus.

48. (New) The expression vector of claim 43 wherein the expression vector is replication defective.

49. (New) The expression vector of claim 43 wherein the immune reaction by the host directed to expression vector associated antigens and the therapeutic molecule of interest is suppressed due to a veto effect.

50. (New) The expression vector of claim 43 wherein the target cell can be present as a single entity or can be part of a larger collection of cells.

51. (New) The expression vector of claim 50 wherein the larger collection of cells includes one of a cell culture, a tissue, an organ, an organ system or an organism.

52. (New) The expression vector of claim 51 wherein the tissue includes epithelial tissue.

53. (New) The expression vector of claim 51 wherein the organ includes one of a heart, a lung, a liver, a gallbladder, a urinary bladder or an eye.

54. (New) The expression vector of claim 51 wherein the organ system includes one of a circulatory system, a respiratory system, a gastrointestinal system, a urinary system, a nervous system or an integumentary system.

55. (New) The expression vector of claim 51 wherein the organism is a mammal.

56. (New) An expression vector for transducing a target cell of a host comprising:

a first nucleic acid sequence encoding an extracellular domain of an α-chain of a CD8 joined to a transmembrane domain; and

a second nucleic acid sequence encoding a therapeutic molecule of interest,

wherein, when the extracellular domain of the α-chain of the CD8 is expressed on a surface of the target cell transduced with the expression vector, persistence of expression of the therapeutic molecule of interest is achieved by suppressing an immune reaction by the host directed to expression vector associated antigens and the therapeutic molecule of interest.

57. (New) The expression vector of claim 56 wherein the transmembrane domain is a transmembrane domain of an α-chain of a CD8.

58. (New) The expression vector of claim 56 wherein the transmembrane domain is a synthetic transmembrane domain.

59. (New) The expression vector of claim 56 wherein the therapeutic molecule of interest is selected from one of hemoglobin-β, GATA-binding protein, d-aminoevulinate synthase, glucose-

6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α-L-iduronidase, iduronate-2-sulfatase, β-glucosidase, α-galactosidase, galactosylceramidase, acid α-glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, α5, Bloom Syndrome Gene Product, or low density lipoprotein receptor.

60. (New) The expression vector of claim 56 wherein the expression vector is selected from one of a recombinant adenovirus or a recombinant adeno-associated virus.

61. (New) The expression vector of claim 56 wherein the expression vector is replication defective.

62. (New) The expression vector of claim 56 wherein persistence of expression of the therapeutic molecule of interest is achieved due to a veto effect.

63. (New) The expression vector of claim 56 wherein the target cell can be present as a single entity or can be part of a larger collection of cells.

64. (New) The expression vector of claim 63 wherein the larger collection of cells includes one of a cell culture, a tissue, an organ, an organ system or an organism.

65. (New) The expression vector of claim 64 wherein the tissue includes epithelial tissue.

66. (New) The expression vector of claim 64 wherein the organ includes one of a heart, a lung, a liver, a gallbladder, a urinary bladder or an eye.

67. (New) The expression vector of claim 64 wherein the organ system includes one of a circulatory system, a respiratory system, a gastrointestinal system, a urinary system, a nervous system or an integumentary system.

68. (New) The expression vector of claim 64 wherein the organism is a mammal.

69. (New) An expression vector for transducing a target cell of a host comprising:

a first nucleic acid sequence encoding an extracellular domain of an α-chain of a CD8 joined to a transmembrane domain; and

a second nucleic acid sequence encoding a therapeutic molecule of interest,

wherein, when the extracellular domain of the α-chain of the CD8 is expressed on a surface of the target cell transduced with the expression vector, persistence of expression of the therapeutic

molecule of interest is achieved by suppressing responding CD4+ T cells and CD8+ T cells of the host such that an immune reaction by the host directed to expression vector associated antigens and the therapeutic molecule of interest is inhibited.

70. (New) The expression vector of claim 69 wherein the transmembrane domain is a transmembrane domain of an α-chain of a CD8.

71. (New) The expression vector of claim 69 wherein the transmembrane domain is a synthetic transmembrane domain.

72. (New) The expression vector of claim 69 wherein the therapeutic molecule of interest is selected from one of hemoglobin-β, GATA-binding protein, d-aminocvulinate synthase, glucose-6-phosphate-dehydrogenase, Coagulation Factor VIII, Coagulation Factor XI, cystic fibrosis transmembrane conductance regulator, ornithine carbamoyl transferase, α-L-iduronidase, iduronate-2-sulfatase, β-glucosidase, α-galactosidase, galactosylceramidase, acid α-glucosidase, hexamidase A, phenylalanine hydroxylase, collagen type IV, α5, Bloom Syndrome Gene Product, or low density lipoprotein receptor.

73. (New) The expression vector of claim 69 wherein the expression vector is selected from one of a recombinant adenovirus or a recombinant adeno-associated virus.

74. (New) The expression vector of claim 69 wherein the expression vector is replication defective.

75. (New) The expression vector of claim 69 wherein the target cell can be present as a single entity or can be part of a larger collection of cells.

76. (New) The expression vector of claim 75 wherein the larger collection of cells includes one of a cell culture, a tissue, an organ, an organ system or an organism.

77. (New) The expression vector of claim 76 wherein the tissue includes epithelial tissue.

78. (New) The expression vector of claim 76 wherein the organ includes one of a heart, a lung, a liver, a gallbladder, a urinary bladder or an eye.

79. (New) The expression vector of claim 76 wherein the organ system includes one of a circulatory system, a respiratory system, a gastrointestinal system, a urinary system, a nervous system or an integumentary system.

80. (New) The expression vector of claim 76 wherein the organism is a mammal.